

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

11020 Sun Center Drive, #200, Rancho Cordova, California 95670-6114

NOTICE OF PUBLIC HEARING
concerning

FILE COPY

TENTATIVE WASTE DISCHARGE REQUIREMENTS
FOR
NORTHERN RECYCLING, LLC
NORTHERN RECYCLING COMPOST - ZAMORA
YOLO COUNTY

Northern Recycling, LLC (Discharger) submitted a Report of Waste Discharge for new waste discharge requirements (WDRs) for the expansion of an existing composting facility and to accept food waste for composting at the facility located one mile south of Zamora. The Discharger proposes to compost up to 10 percent food waste mixed with green waste as co-collected organic materials from residential and commercial sources using various windrow composting methods on compacted soil pads with hydraulic conductivity of 1×10^{-6} centimeters per second or less. The Discharger also proposes to compost up to 40 percent food waste mixed with green waste using various covered aerated static pile (ASP) methods on a concrete pad with leachate drainage/aeration bunkers. The proposed Order requires the Discharger to construct a composite-lined leachate pond for the ASP leachate drainage, two composite-lined runoff retention ponds for leachate and contact water drainage from the pad areas, and two composite-lined overflow ponds for additional storage capacity when needed. The required pad and pond liners are necessary to protect groundwater quality. Further information about the facility and the proposed requirements can be found in the tentative WDRs that are available on the Central Valley Water Board's website at www.waterboards.ca.gov/centralvalley/board_decisions/tentative_orders.

A public hearing concerning this matter will be held during the Regional Board meeting which is scheduled for:

DATE: 30/31 May 2013
TIME: 8:30 a.m.
PLACE: Central Valley Regional Water Board
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670

Persons wishing to comment on this noticed hearing item must submit evidence, if any, or comments in writing to the Regional Board no later than 5:00 p.m. on **2 April 2013**. Written materials submitted after 5:00 p.m. on **2 April 2013** will not be accepted and will not be incorporated into the administrative record if doing so would prejudice any party.

All interested persons may speak at the Board meeting, and are expected to orally summarize their written submittals. Oral testimony will be limited in time by the Board Chair.

NOTICE OF PUBLIC HEARING
NORTHERN RECYCLING COMPOST – ZAMORA
YOLO COUNTY

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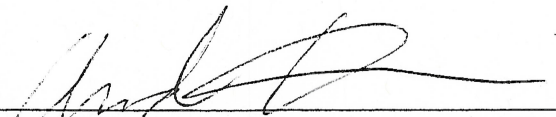
An objection by a party, either in writing or at the time of the hearing, to the decision to hold a hearing not allowing cross-examination and rebuttal testimony by designated parties shall be resolved by the Board Chair before going ahead under the proposed procedures. Failure to make a timely objection to the use of the proposed hearing procedure before those procedures are used will constitute consent to those procedures.

Anyone having questions on the proposed item should contact **Bill Brattain** at (916) 464-4622. Interested parties may download the proposed Order and related documents from the Regional Board's Internet website at http://www.waterboards.ca.gov/centralvalley/board_decisions/tentative_orders/. Copies of these documents can also be obtained by contacting or visiting the Regional Board's office at 11020 Sun Center Drive, #200, Rancho Cordova, California 95670-6114 weekdays between 8:00 a.m. and 5:00 p.m.

The procedures governing Regional Water Board meetings may be found at Title 23, California Code of Regulations, Section 647 et seq. and are available upon request. Hearings before the Regional Water Board are not conducted pursuant to Government Code section 11500 et seq. The procedures may be obtained by accessing http://www.waterboards.ca.gov/water_laws/. Information on meeting and hearing procedures is also available on the Regional Board's website at http://www.waterboards.ca.gov/centralvalley/board_info/meetings/mtgprocd.shtml or by contacting any one of the Board's offices. Questions regarding such procedures should be directed to Ms. Kiran Lanfranchi-Rizzardi at (916) 464-4839.

The hearing facilities will be accessible to persons with disabilities. Individuals requiring special accommodations are requested to contact Ms. Kiran Lanfranchi-Rizzardi at (916) 464-4839 at least 5 working days prior to the meeting. TTY users may contact the California Relay Service at 1-800-735-2929 or voice line at 1-800-735-2922.

Please bring the above information to the attention of anyone you know who would be interested in this matter.



Andrew Altevogt, Assistant Executive Officer

1 March 2013

NORTHERN RECYCLING, LLC; NORTHERN RECYCLING COMPOST - ZAMORA; Yolo County

Northern Recycling, LLC (Discharger) submitted a Report of Waste Discharge for new waste discharge requirements (WDRs) for the expansion of an existing composting facility and to accept food waste for composting at the facility located one mile south of Zamora. The Discharger proposes to compost up to 10 percent food waste mixed with green waste as co-collected organic materials from residential and commercial sources using various windrow composting methods on compacted soil pads with hydraulic conductivity of 1×10^{-6} centimeters per second or less. The Discharger also proposes to compost up to 40 percent food waste mixed with green waste using various covered aerated static pile (ASP) methods on a concrete pad with leachate drainage/aeration bunkers. The proposed Order requires the Discharger to construct a composite-lined leachate pond for the ASP leachate drainage, two composite-lined runoff retention ponds for leachate and contact water drainage from the pad areas, and two composite-lined overflow ponds for additional storage capacity when needed. The required pad and pond liners are necessary to protect groundwater quality. (WLB)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2013-XXXX

WASTE DISCHARGE REQUIREMENTS
FOR
NORTHERN RECYCLING, LLC
NORTHERN RECYCLING COMPOST - ZAMORA
YOLO COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Central Valley Water Board) finds that:

1. Northern Recycling, LLC (hereafter, "Discharger") owns and operates the Northern Recycling Compost - Zamora facility (hereafter, "facility"), a composting facility in Yolo County. The facility began operating in 2001 under a general conditional waiver of waste discharge requirements for green waste composting (Order No. 96-031). The facility was owned and operated by Grover Landscape Services from 2001 until 2008. The facility property was formerly a livestock feedlot until 1998 and contains five ponds that were formerly used for manure storage.
2. The facility is located at 11220 County Road 94 in Zamora as shown in Attachment A, which is incorporated herein and made part of this Order by reference. The facility on a portion of a 104.52-acre parcel in Section 29, T11N, R1E, MDB&M, corresponding to Assessor's Parcel Number 55-200-04.
3. On 14 January 2013, the Discharger submitted a 10 January 2013 Report of Waste Discharge (ROWD) to obtain individual waste discharge requirements (WDRs) in order to expand the area of the facility and to accept additional feedstocks (primarily food waste). The Discharger proposes to expand the area of the facility from 56 acres to 74 acres and to increase tonnages and volumes to 700 tons per day and 190,000 cubic yards onsite. The additional 18 acres will be used for finished compost storage and new runoff retention ponds. The Discharger proposes to compost up to 10 percent food waste mixed with green waste as co-collected organic materials from residential and commercial sources using various windrow composting methods on compacted soil pads with hydraulic conductivity of 1×10^{-6} centimeters per second (cm/s) or less. The Discharger also proposes to compost up to 40 percent food waste mixed with green waste using various covered aerated static pile (ASP) methods on a concrete pad with leachate drainage/aeration bunkers. The Discharger will construct a composite-lined leachate pond for the ASP leachate drainage, two composite-lined runoff retention ponds for leachate and contact water drainage from the pad areas, and two composite-lined overflow ponds for additional storage capacity when needed. The overflow ponds will be constructed in the area of two of the former manure storage ponds. The facility will also include a biomass energy plant that burns wood waste for conversion into electricity. The proposed site plan is shown in Attachment B, which is incorporated herein and made part of this Order by reference.

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4. The Discharger has applied for an updated Solid Waste Facility Permit (Facility No. 57-AA-0029) for this activity with the Yolo County Environmental Health Department who enforces the regulations of the California Department of Resources Recovery and Recycling (CalRecycle) for composting facilities. There are significant differences in the scope, authority, and focus of the CalRecycle's regulations governing composting and the requirements necessary, under this Order, for the protection of water quality.
5. The Discharger has permits from the Yolo-Solano Air Quality Management District for stationary equipment sources that include a Permit to Operate P-64-09(a1) for a pilot-scale covered ASP system. The permit allows up to 30 tons per day of green waste and with up to 40% food waste (12 tons per day of food waste) to be composted using the pilot-scale covered ASP system. The permit also allows grape pomace to be accepted for composting three consecutive months of the year (starting on the first day it is accepted). The ROWD states that the Discharger will apply for additional air permits for the facility expansion.
6. The Discharger has coverage under the general Industrial Storm Water Permit 97-03-DWQ under WDID #5S57I023540, and has a Storm Water Pollution Prevention Plan (SWPPP) for the current composting operation. This Order requires the Discharger to prepare an updated SWPPP for the proposed facility expansion.

WASTES AND THEIR CLASSIFICATION

7. The Discharger currently uses or accepts the following feedstocks, additives, and amendments for composting:
 - a. Water from the onsite supply well.
 - b. Water from the onsite ponds.
 - c. Green waste.
 - d. Food waste with small amounts of paper waste (up to 12 tons per day to the pilot-scale covered ASP system).
 - e. Grape pomace (three consecutive months per year).
 - f. Plant wastes.
 - g. Plant material from agricultural sources such as orchards, crop residues, and rice hulls.
 - h. Untreated wood wastes and oversized wood material (generally processed and sent to biomass power plants).
 - i. Animal bedding and manure.
 - j. Gypsum (primarily from gypsum wallboard).
 - k. Lime.
 - l. Agricultural minerals.

8. The Discharger proposes to accept the following additional feedstocks for composting after site upgrades are completed:
 - a. Food waste (up to 10% on soil pads and 40% in a full-scale covered ASP system).
 - b. Cannery wastes.
 - c. Non-recyclable paper.
 - d. Waxed cardboard.
 - e. Anaerobic digestion digestate.
 - f. Compostable plastics.
9. The Discharger proposes to accept or use the following additional additives or amendments for composting after site upgrades are completed:
 - a. Wood chips.
 - b. Clean soils.
 - c. Clay.
 - d. Fertilizers.
 - e. Urea.
10. California Code of Regulations, title 27 ("Title 27"), section 20005 et seq. establishes a waste classification system. Wastes are classified as either inert wastes, nonhazardous solid wastes, or designated wastes. Inert wastes pose minimal risk to water quality, nonhazardous solid wastes present a greater risk than inert wastes, and designated wastes pose the greatest risk to water quality. The wastes specified in Findings 7 through 9 would generally meet the definition of nonhazardous solid wastes when discharged to a Class III municipal solid waste landfill that accepts only inert and nonhazardous wastes. Title 27, section 20200(a)(1) allows the Central Valley Water Board to find that, "...a particular waste constituent or combination of constituents presents a lower risk of water quality degradation than indicated by classification according to this article." Therefore, to the extent that a particular compostable waste, additive, or amendment, as specified in Finding 7 through 9, could be characterized as designated waste, such waste types will be regulated as a nonhazardous solid waste under this Order pursuant to Title 27, section 20200(a)(1) because the wastes present a lower risk to water quality than typical designated wastes when managed as required by this Order.
11. The key requirements of this Order include the construction of compacted soil pads with hydraulic conductivity of 1×10^{-6} cm/s or less; a concrete pad for the 40 percent food waste composting area; and composite-lined retention ponds, leachate pond, and overflow ponds. These requirements are as proposed by the Discharger in the ROWD. The attached Monitoring and Reporting Program (MRP) additionally requires twice annual monitoring of the water in the retention ponds and leachate pond. The Central Valley Water Board may revise this Order with more stringent requirements if monitoring indicates the threat to water quality is greater than expected.

SITE DESCRIPTION

12. The site is located about one mile south of the town of Zamora and about one mile west of Interstate 5 at the base of the Dunnigan Hills that lie immediately to the west of the site. The site is generally flat with the surrounding area sloping from west to east. The natural elevation of the site is approximately 80 to 85 feet above mean sea level (MSL). Smith Creek is to the south of the facility boundary and runs through the parcel on which the facility is located as shown on Attachment B.
13. Land uses within 1,000 feet of the facility are agricultural and include orchards and vineyards to the north and east, and livestock grazing to the west and south. A residence is located approximately 1,200 feet south of the proposed expanded facility boundary and 600 feet south of the parcel boundary.

SITE GEOLOGY

14. According to the ROWD, the site is located on the western limit of the Sacramento Valley adjacent to the Dunnigan Hills. Soils beneath the site are mapped as silt-clay loam of the Tehama Group on the western portion of the site, gravelly loam of the Corning Group on the western portion of the site, and clay of the Sehorn Group in the southeastern portion of the site along Smith Creek. Onsite soils have a moderate infiltration rate and are well drained. The surface soils are slightly weak, porous, and compressible and exhibit randomly arrayed desiccation cracks generally associated with expansive soils. Laboratory tests on surface soils achieved permeabilities of between 10^{-7} and 10^{-8} cm/s.

PRECIPITATION

15. The facility receives an average of 17.94 inches of precipitation per year as measured at the Woodland 1 MNM gauge between the years 1873 and 2001. The gauge is located about 8 miles from the site. The 25-year, 24-hour storm event for the site is 3.98 inches and the 100-year, 24-hour event is 5.02 inches based on data obtained online from the National Oceanic and Atmospheric Administration. The mean pan evaporation is 82.68 inches per year based on data from the Western Regional Climate Center.
16. According to the ROWD, the facility is not within the 100-year floodplain based on the 18 June 2010 Floodplain Map No. 06113C0275G issued by the Federal Emergency Management Agency.

GROUNDWATER AND SURFACE WATER

17. There is one onsite water supply well located near the entrance to the facility that was installed in 1971. The well is used for industrial purposes only, primarily as the water source for the composting operation. According to the driller's report, groundwater was

first encountered at a depth of 60 feet below ground surface (bgs) and then rose to 47 feet bgs upon development of the well. The highest recorded groundwater elevation in the closest Department of Water Resources well to the site is 35 feet bgs.

18. The beneficial uses of groundwater, as specified in *The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition* (hereafter Basin Plan), are municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.
19. The ROWD contains groundwater quality data from the onsite supply well that indicates groundwater has been impacted with nitrate from the former livestock feedlot and former manure storage ponds at the site. A sample from the well in 2008 showed nitrate as nitrogen at 9.8 milligrams per liter (mg/L) which is just below the Maximum Contaminant Level (MCL) of 10 mg/L. Five samples collected in 2011 and 2012 had concentrations of nitrate as NO₃ ranging from 38 to 62 mg/L. The MCL for nitrate as NO₃ is 45 mg/L.
20. The ROWD contains a 27 April 2012 *Water Supply Assessment* in Appendix C to assess whether the onsite supply well has capacity for the anticipated water to be used at the expanded facility. The current water usage is 6 million gallons per year and the expanded facility will use 12 million gallons per year. The report concludes that the supply well has sufficient capacity for the expanded facility.
21. Surface water from the facility currently drains to unlined retention ponds. The proposed expansion includes additional retention ponds, overflow ponds, and a leachate pond. All ponds will be lined. This Order requires at least two feet of freeboard to be maintained in the leachate pond, retention ponds, and overflow ponds at all times. The Discharger plans to haul excess water from the ponds to either the Woodland or Davis wastewater treatment plants when necessary. The Discharger has coverage under the General NPDES Permit for industrial activities (NPDES General Permit No. 97-03-DWQ); however, the runoff containing leachate cannot be discharged under that permit. The permit only allows discharges of storm water from areas where Best Management Practices (BMPs) are being implemented such as covering the compost piles and preventing contact of storm water with wastes. Surface water in the surrounding area drains to the Colusa Basin Drain, then into the Yolo Bypass, then into the Port of Sacramento Deep Water Ship Channel, and then to the Sacramento River just north of Rio Vista.
22. The designated beneficial uses of the Colusa Basin Drain, as specified in the Basin Plan, are agricultural supply; water contact recreation; warm fresh water habitat; spawning, reproduction, and/or early development; migration of aquatic organisms; and wildlife habitat.

PROPOSED FACILITY CONSTRUCTION AND IMPROVEMENTS

23. The ROWD contains a 14 November 2012 geotechnical study report in Appendix C that has information on engineering properties of site soils and recommendations for design parameters for construction of site containment features. The study reports soils information from test pits and borings from studies in the existing and expansion areas conducted in 2009 and 2012. Based on the results of the study, the report recommends the removal and replacement of 1 to 3 feet of existing weak, porous, compressible clayey surface soils and heterogeneous fill in the pad and pond areas; improvements to the stability of the existing pond slopes and embankments; and the construction of liners in the pond bottoms due to the permeability of the existing soils.
24. **Pads for Composting and Storage Areas.** The Discharger proposes to construct one-foot thick compacted soil pads with hydraulic conductivity of 1×10^{-6} cm/s or less for the composting and storage areas. The pads will be sloped a minimum of one percent for drainage and will be protected from desiccation. The pad surface, the one-foot compacted soil layer, and pad subgrade will be constructed in such a way as to allow equipment to operate without damage. The areas to receive this pad design are shown on Attachment B as follows:
- Windrow, curing, processing, or compost storage areas.
 - Finished compost screening and storage areas.
 - Green waste processing and/or storage area.
 - Tipping area.
25. **Pad for Aerated Static Pile (ASP) Composting Area.** The Discharger proposes to construct a concrete slab in a 5.1-acre area for the proposed ASP compost system for composting of up to 40 percent food waste, as shown on Attachment B as "ASP aeration and drainage slab." The concrete pad and pad subgrade will be designed to minimize cracking. Within the concrete slab area, aeration zones will include orifices with concrete bunkers that will drain to a dedicated composite-lined leachate pond that only accepts leachate that drains into the ASP composting bunkers.
26. **Leachate Retention Pond, Retention Ponds, and Overflow Ponds.** The Discharger proposes to construct five new composite-lined ponds to collect leachate and contact water from the composting and storage areas, as shown on Attachment B as the Leachate Pond, South Retention Pond, North Retention Pond, Overflow Pond #1, and Overflow Pond #2. The composite liner system for each of the ponds will consist of a 40-mil geomembrane (60-mil if high-density polyethylene [HDPE]) immediately overlying a one-foot compacted soil layer with hydraulic conductivity of 1×10^{-6} cm/s or less (or a geocomposite clay liner [GCL]). The liner system will be installed over a prepared base after removal of existing inferior soils as recommended in the geotechnical study report.

27. This Order requires the Discharger to construct the proposed compost pads and pond liner systems as part of the facility expansion and prior to accepting the additional feedstocks for composting. This Order also requires that the Discharger submit a design report and Construction Quality Assurance (CQA) Plan for construction of the composting pads and pond liners and to submit a final construction report and CQA report documenting that they were constructed as required following construction.
28. Prior to construction and site expansion activities, this Order requires that the Discharger obtain coverage under the General NPDES Permit for construction activities (Order 2009-0009-DWQ) and to prepare a SWPPP for construction activities.

POND CAPACITY AND WATER BALANCE

29. The Discharger proposes to construct the North Retention Pond and South Retention Pond with capacity for a 25-year, 24-hour storm event. The two Overflow Ponds will have additional capacity for average annual rainfall, plus a 100-year, 24-hour storm event. The Leachate Pond will have capacity for average annual rainfall, plus a 100-year, 24 hour storm event. This Order requires all ponds to maintain at least two feet of freeboard at all times.
30. The ROWD contains water balance calculations for the ponds in Appendix C. The water balance assumes a runoff coefficient of 0.7 which is conservative since the range of coefficients commonly used for low-permeability surfaces such as asphalt is 0.7 to 0.95 and since some rainfall will be absorbed by the compost windrows. The water balance also includes components for evaporation and for water usage for composting from 16 April through 15 November of each year. The water balance calculations show that the ponds will have capacity for the average annual rainfall, plus a 100-year, 24-hour storm event. This is significantly more capacity than was required under the now expired general conditional waiver for green waste composting (Order 96-031) which only required capacity for a 25-year, 24-hour storm event and did not take annual rainfall into account. The facility drainage ditches will be designed for a 25-year, 24-hour storm event.

CEQA AND OTHER LEGAL REFERENCES

31. On ____ 2013, ***{date to be inserted after CEQA is completed}*** the Yolo County Planning and Public Works Department certified a Mitigated Negative Declaration for the facility expansion finding that the project will not result in any significant environmental impact. Central Valley Water Board staff has considered the mitigated negative declaration for the composting facility expansion in preparation of these WDRs.
32. This Order implements:
 - a. The Basin Plan.

- b. State Water Resources Control Board (State Water Board) Resolution 68-16, the *Policy with Respect to Maintaining High Quality Waters of the State*.
33. Based on the threat and complexity of the discharge, the facility is determined to be classified 3-C as defined below:
- a. Category 3 threat to water quality, defined as, "Those discharges of waste that could degrade water quality without violating water quality objectives, or could cause a minor impairment of designated beneficial uses as compared with Category 1 and Category 2."
 - b. Category C complexity, defined as, "Any discharger for which waste discharge requirements have been prescribed pursuant to Section 13263 or the Water Code not included in Category A or Category B as described above. Included are dischargers having no waste treatment systems or that must comply with best management practices, dischargers having passive treatment and disposal systems, or dischargers having waste storage systems with land disposal."
34. California Water Code section 13267 states, in part, "(a) *A regional board, in establishing...waste discharge requirements... may investigate the quality of any waters of the state within its region*" and "(b) (1) *In conducting an investigation..., the regional board may require that any person who has discharged, discharges, or is suspected of discharging, or who proposes to discharge within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of discharging, or who proposes to discharge waste outside of its region that could affect the quality of waters of the state within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In requiring these reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify evidence that supports requiring the person to provide the reports.*"
35. The technical reports required by this Order and the attached Monitoring and Reporting Program are necessary to assure compliance with these waste discharge requirements. Northern Recycling, LLC is responsible for the discharges of waste at the facility subject to this Order and are, therefore, subject to CWC Section 13267(b).
36. Section 402 of the Clean Water Act [33 U.S.C. §1342(p)] and regulations adopted by the U.S. Environmental Protection Agency (40 CFR §122.26) require that facilities which discharge storm water associated with industrial activity be regulated by a National Pollutant Discharge Elimination System (NPDES) permit. The State Water Board has adopted a General NPDES Permit for industrial activity (NPDES General Permit No. 97-03-DWQ). Accordingly, composting operations are included in Standard

Industrial Classifications 2875 and 2879. Persons engaged in mixing fertilizers from purchased fertilizer materials (2875) or in manufacturing soil conditioners (2879) must, as a condition of this Order, obtain coverage and comply with the conditions of that General Permit.

PROCEDURAL REQUIREMENTS

37. All local agencies with jurisdiction to regulate land use, solid waste disposal, air pollution, and to protect public health have approved the use of this site for the discharges of waste to land stated herein.
38. The Central Valley Water Board notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge, and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
39. The Central Valley Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.
40. Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with CWC section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of the Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

or will be provided upon request.

IT IS HEREBY ORDERED, pursuant to California Water Code sections 13263 and 13267, that Northern Recycling, LLC and its agents, assigns and successors, in order to meet the provisions of Division 7 of the California Water Code and the regulations adopted thereunder, shall comply with the following:

A. DISCHARGE PROHIBITIONS

1. The discharge of wastes defined as "hazardous" at the facility, is prohibited. For the purposes of this Order, the term "hazardous" is as defined in Title 27.
2. The discharge of wastes defined as "designated" at the facility, is prohibited except for the feedstocks, additives, and amendments cited in Findings 7 through 9 of this

Order. For the purposes of this Order, the term "designated" is as defined in Title 27.

3. The discharge of wastes, feedstocks, additives, or amendments that are not listed in Findings 7 through 9 of this Order is prohibited.
4. Landfilling of any waste at the facility is prohibited.
5. Storage, processing, or composting of green/food waste outside of the storage, processing, and composting pad areas as shown on Attachment B, and as defined in Facility Specification C.4, is prohibited.
6. The discharge of liquid waste at the facility, other than runoff or leachate from storage, composting, or processing to the leachate, retention, or overflow ponds as shown on Attachment B is prohibited.
7. Ponding of liquids on the composting pad areas, as defined in Facility Specification C.4 below, is prohibited.
8. The discharge or storage of drilling mud; biosolids; non-compostable plastic; glass; metal; septage; sludges; waste edible oil, petroleum oil, or grease; mixed solid waste; wood containing lead-based paint, wood preservative, or ash from such wood; construction and demolition debris; or asbestos at the facility is prohibited.

B. DISCHARGE SPECIFICATIONS

1. The Discharger shall implement composting in a manner that does not cause, or threaten to cause, a condition of contamination, pollution or nuisance (including odor), as defined in the California Water Code section 13050.
2. The discharge of wastes shall not cause water quality degradation.
3. The Discharger shall not discharge any of the feedstocks, additives, or amendments listed in Findings 8 and 9 at the facility (other than food waste to the pilot-scale covered ASP system) until the facility is upgraded as proposed with the required pads and composite-lined ponds and the final construction report has been approved by Central Valley Water Board staff. In the event that the facility is not upgraded as required by **1 September 2015**, the Discharger shall submit an amended ROWD with information necessary for revised WDRs or must obtain coverage under any statewide composting order that may exist at that time.
4. Wastes shall only be discharged into, and shall be confined to, units specifically designed for their containment as described in this Order.
5. The Discharger shall conduct a load-checking program as proposed in Section 4.1 of the 10 January 2013 ROWD. Each incoming load shall be checked and any

materials or wastes discovered during the load-checking program that are not-allowed by this Order shall be removed from the facility for proper recycling or disposal at a properly permitted facility as proposed in the ROWD.

6. The Discharger shall not use any additives or amendments other than those listed in Finding 9, and shall limit their use (other than water from the supply well or ponds) to no more than 20% (no more than 5% for gypsum, lime, fertilizers, or urea) — on a dry-weight basis — of the initial total feedstock for any given batch of compost.
7. The Discharger shall, within **72 hours**, remove and relocate any wastes discharged at this facility in violation of this Order. If the Discharger is unable to remove and relocate the waste, the Discharger shall submit a report to the Central Valley Water Board within **two weeks** explaining how the discharge occurred, why the waste cannot be removed, and any updates to the waste acceptance program necessary to prevent re-occurrence.

C. FACILITY SPECIFICATIONS

1. The pad, liner, and pond sizing requirements of this Order shall become effective when the Discharger the additional feedstocks, additives, and amendments as listed in Findings 8 and 9. Prior to upgrading the facility as required, the Discharger may continue composting the feedstocks, additives, and amendments as listed in Finding 7. The upgrades shall be completed by **1 September 2015** unless the Discharger submits an amended ROWD or obtains coverage under any statewide composting order that may exist as that time.
2. Compost pads and ponds shall be designed and constructed under the direct supervision of a California registered civil engineer, or a certified engineering geologist, and shall be certified by that individual as meeting the requirements of this Order prior to waste discharge.
3. Prior to construction, all pad and pond areas shall have unsuitable soils removed as recommended in the ROWD. The design report for the expansion project shall include specifications for removing unsuitable soils.
4. **Compost Pad Design** — The compost pad areas, as shown on Attachment B as “Windrow, Curing, Processing, or Compost Storage Areas”, “Green Waste Processing and/or Storage Area”, “Finished Compost Screening and Storage Areas”, and “Tipping Area” shall be designed and constructed with pads that include the following:
 - a. A one-foot thick compacted soil layer with hydraulic conductivity of 1×10^{-6} cm/s or less.

- b. An all-weather surface that allows equipment to operate without damage and does not allow desiccation.
 - c. Be sloped a minimum of one percent (1%) for drainage.
- A design report shall be submitted pursuant to ¶D.4. prior to construction of compost pad areas.
- 5. **ASP Aeration Slab Design** — The ASP aeration slab area, as shown on Attachment B shall be designed and constructed as follows:
 - a. A concrete pad and pad subgrade designed to minimize cracking.
 - b. Include a dedicated leachate drainage system for the ASP compost piles that drains to the Leachate Pond.
- 6. Composting pads and slabs and their respective containment structures shall be designed and constructed to limit, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, washout, and overtopping.
- 7. **Pond Design** — The Leachate Pond, Retention Ponds, and Overflow Ponds, as shown on Attachment B, shall be designed and constructed as follows:
 - a. Include a composite liner system consisting of at least a 40-mil geomembrane (60-mil if HDPE) immediately overlying a low-hydraulic conductivity soil layer consisting of at least one foot of compacted soil with hydraulic conductivity of 1×10^{-6} cm/s or less (or a GCL).
 - b. The Leachate Pond shall be sized to contain leachate that drains into the ASP leachate system from at least the average annual rainfall plus the 100-year, 24-hour storm event while maintaining at least two feet of freeboard.
 - c. The Retention Ponds and Overflow Ponds, when taken in total, shall be sized to contain leachate and runoff from the remaining pad areas from at least the average annual rainfall plus the 100-year, 24-hour storm event.
- 8. **Drainage Ditch Design** — Drainage ditches that convey leachate and runoff from the pad areas to the ponds shall be designed and constructed to the same standards as the compost pads (or shall consist of concrete) and shall accommodate flow from at least a 25-year, 24-hour storm event.
- 9. The Discharger shall install and maintain an onsite rainfall gauge and shall record and report data as required in the attached MRP. Onsite rainfall data shall be used to determine if the site has experienced rainfall that exceeds the pond design criteria.
- 10. The Discharger shall maintain containment and control structures (e.g., berms, pads, ponds, and run-on/run-off control structures) in good working order.

11. The Discharger shall maintain at least two feet of freeboard in the Leachate Pond, the Retention Ponds, and the Overflow Ponds at all times.
12. Dissolved oxygen in the leachate, retention, and overflow ponds shall not be less than 1.0 milligrams per liter to prevent objectionable odors.
13. The leachate, retention, and overflow ponds shall be managed to prevent the breeding of mosquitoes.
14. By **1 October** of each year, the Discharger shall conduct an annual inspection of the operation in order to assure that the site has been prepared for the rainy season to repair damage to the pad and pond liners and to prevent ponding on the pads. The Discharger shall take photos of any problems areas before and after repairs. All wet weather preparations shall be completed by **1 November** of each year. The Discharger shall include a synopsis of these preparations in the next Semiannual Monitoring Report required under ¶D.3. of this Order.
15. The Discharger shall allow Central Valley Water Board staff to:
 - a. Enter the facility during normal working hours;
 - b. Copy any record relating to the design or operation of the facility;
 - c. Sample any waste, additives, discharge, run-on or run-off; and
 - d. Take recordings, photographs, or videotapes of the facility and its operation.
16. At closure, all wastes, residual wastes and adjacent natural geologic materials contaminated by wastes, shall be completely removed from the facility. Closure shall be conducted under the direct supervision of a California registered civil engineer or a certified engineering geologist.

D. REQUIRED REPORTS AND NOTICES

1. At least **120 days** prior to terminating operations or to initiating any change in the facility, its location, its ownership, its operations, or the waste being processed (other than as described in this Order), the Discharger shall submit an amended ROWD proposing and substantiating such change.
2. Upon the occurrence of any event that could threaten public health, create a nuisance, threaten surface or ground water quality, or otherwise result in a violation of this Order, the Discharger shall verbally notify Central Valley Water Board staff within **24 hours** of the event, and follow-up the verbal notification with written documentation of the event within **14 calendar days** of the incident.

3. The Discharger shall submit Semiannual Monitoring Reports to the Central Valley Water Board as required by MRP No. R5-2013-XXXX.
4. The Discharger shall submit a design report for construction of the compost pads and ponds for Central Valley Water Board staff review and approval at least **60 days** prior to constructing these facilities. The design report shall propose liner systems that meet the requirements of this Order and include a CQA Plan to ensure proper testing and quality assurance of liner materials and compacted soil pads.
5. The Discharger shall submit a final construction report documenting that the compost pads and ponds have been constructed in accordance with the approved design report and CQA Plan no more than **60 days** after completion of construction. The Discharger shall not discharge food waste, grape pomace, cannery wastes, anaerobic digestion digestate, or any other feedstocks, additives, or amendments at the facility that were not listed in the 2001 ROWD when the facility obtained coverage under the now expired Conditional Waiver 96-031 until the final construction report is approved by Central Valley Water Board staff.

E. PROVISIONS

1. The Discharger shall comply with these WDRs and the attached MRP No. R5-2013-XXXX, and any revisions thereto as ordered by the Executive Officer. A violation of the MRP is a violation of these waste discharge requirements.
2. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which are attached hereto and by reference a part of this Order. This attachment and its individual paragraphs are commonly referred to as "Standard Provision(s)."
3. The Discharger shall submit reports required by this Order pursuant to California Water Code section 13267. Failure to submit the reports by the due dates shown may lead to enforcement action pursuant to California Water Code section 13268.
4. The Discharger shall file a Notice of Intent (NOI) with the State Water Board for coverage under the General NPDES permit for construction activities (NPDES General Permit No. 2009-0009-DWQ) prior to construction at the facility, and shall submit a SWPPP to the Central Valley Water Board in accordance with the requirements of the General NPDES Permit.
5. The Discharger shall maintain coverage under the General NPDES permit for industrial activities (NPDES General Permit No. 97-03-DWQ), and shall maintain a SWPPP in accordance with the requirements of the General NPDES Permit. The SWPPP shall include all information, plans, and practices required by the General NPDES Permit for the proposed expanded facility prior to operation of the expanded facility.

6. The Discharger shall maintain waste containment facilities and precipitation and drainage control systems, and shall immediately notify the Central Valley Water Board of any flooding equipment failure, slope failure, or other change in site conditions which could impair the integrity of waste or leachate containment facilities or of precipitation and drainage control structures.
7. The Discharger shall maintain legible records of the volume of green/food waste discharged at the facility and the manner and location of discharge. Such records shall be maintained at the facility or the facility's administration office until the completion of site closure. These records shall be available for review by representatives of the Central Valley Water Board and of State Water Board at any time during normal business hours.
8. In the event of any change in ownership of this waste management facility, the Discharger shall notify the succeeding owner or operator in writing of the existence of this Order prior to the change in ownership. A copy of that notification shall be sent to the Central Valley Water Board.
9. A copy of this Order shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.
10. The Central Valley Water Board will review this Order periodically and will revise these requirements when necessary.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on _____.

PAMELA C. CREEDON, Executive Officer

WLB

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2013-XXXX
FOR
NORTHERN RECYCLING, LLC
NORTHERN RECYCLING COMPOST - ZAMORA
YOLO COUNTY

Northern Recycling, LLC (hereafter "Discharger") shall submit reports required by this Monitoring and Reporting Program (MRP) and the applicable portions of the Standard Provisions and Reporting Requirements dated 1 March 1991 pursuant to California Water Code section 13267. Failure to submit the required reports can result in the imposition of civil monetary liability. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

POND MONITORING

The Discharger shall monitor and sample water in the ponds in accordance with Table 1. Sample collection shall follow standard USEPA protocol.

TABLE 1 – POND MONITORING PROGRAM		
<u>Parameter</u>	<u>Units</u>	<u>Frequency</u>
Field Parameters		
Freeboard	Feet & Tenths	Weekly/Monthly ¹
Dissolved Oxygen	mg/L	Weekly ²
Specific Conductance	µmhos/cm	Semiannually ³
pH	Number	Semiannually ³
Turbidity	Turbidity Units	Semiannually ³
Monitoring Parameters		
Ammonia as Nitrogen	mg/L	Semiannually ³
Biochemical Oxygen Demand	mg/L	Semiannually ³
Chloride	mg/L	Semiannually ³
Nitrate as Nitrogen	mg/L	Semiannually ³
Sulfate	mg/L	Semiannually ³
Total Dissolved Solids	mg/L	Semiannually ³
Total Fixed Dissolved Solids	mg/L	Semiannually ³
Total Organic Carbon	mg/L	Semiannually ³
¹ Weekly from 1 October to 31 May and Monthly from 1 June to 30 September for all ponds .		
² Dissolved oxygen shall be measured weekly in all ponds . Dissolved oxygen shall not be less than 1.0 milligram per liter to prevent odors.		
³ One sample between 1 January and 30 June and one sample between 1 July and 31 December of each year from the Leachate Pond and the two Retention Ponds . The two samples from each pond shall be collected at least three months apart.		

FACILITY MONITORING

The Discharger shall conduct facility monitoring as follows:

a. **Annual Facility Inspection**

By **1 October** of each year, the Discharger shall conduct an annual inspection of the operation in order to assure that the site has been prepared for the rainy season to repair damage to the pad and pond liners and to prevent ponding on the pads. The Discharger shall take photos of any problem areas before and after repairs. All wet weather preparations shall be completed by **1 November** of each year. Annual facility inspection reporting shall be submitted as required in the Reporting section of this MRP.

b. **Discharge Monitoring**

The Discharger shall maintain records of the following for reporting purposes:

- 1) The volume of pond water hauled to a permitted facility from each pond during the reporting period.
- 2) The additives and amendments used during the reporting period.
- 3) Verification of the load checking program.

c. **Rainfall Monitoring**

The Discharger shall monitor rainfall from an onsite rainfall gauge year round.

d. **Standard Observations**

The Discharger shall conduct Standard Observations at the facility in accordance with this section of the MRP. Standard observations shall be conducted in accordance with the following schedule:

<u>Frequency</u>	<u>Season</u>
Weekly	Wet: 1 October to 31 May
Monthly	Dry: 1 June to 30 September

The Standard Observations shall include:

- 1) Evidence of ponded water, rutting, or desiccation on any of the pads or drainage ditches. These areas shall be noted on a facility map.
- 2) Evidence of erosion issues throughout the property.

Results of Standard Observations shall be submitted as required in the Reporting section of this MRP.

REPORTING

The Discharger shall report field and laboratory test results in Semiannual Monitoring Reports. The Discharger shall submit the Semiannual Monitoring Reports to the Central Valley Water Board by **1 February** and **1 August** of each year. The Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. A discussion of the monitoring results shall precede the tabular summaries.

As required by the California Business and Professions Code sections 6735, 7835, and 7835.1, all reports shall be prepared by a registered professional engineer or geologist (or their subordinate) and signed, and if required stamped, by the registered professional.

Each Semiannual Monitoring Report is to include the following information:

- a. A summary of the facility's state of compliance with Waste Discharge Requirements (WDRs) Order No. R5-2013-XXXX during the semiannual reporting period.
- b. A discussion about the monitoring data and standard observations along with tabulated **cumulative** pond monitoring data, pond freeboard levels, and onsite rainfall data. The report shall document completion of all standard observations and any necessary repairs. The report shall include information about pond levels relative to the water balance in the ROWD and any offsite discharge of pond water at a waste water treatment plant or under the Industrial Storm Water Permit, including sampling results.
- c. A discussion of the required discharge monitoring including the volumes of water hauled to a permitted facility from each pond, a list of additives and amendments used, and verification that the load checking program was conducted as required by the WDRs.
- d. A copy of the laboratory analytical reports and chain of custody.
- e. The report due 1 February shall include documentation of completion of the annual facility inspection, maintenance, and repairs required by this MRP and ¶C.13 of the WDRs.
- f. A discussion of any events that threatened public health, created a nuisance, threatened surface or ground water quality, or otherwise resulted in a violation of this Order addressed during the prior year, under ¶D.2. of the WDRs, together with the Discharger's response to each such event.

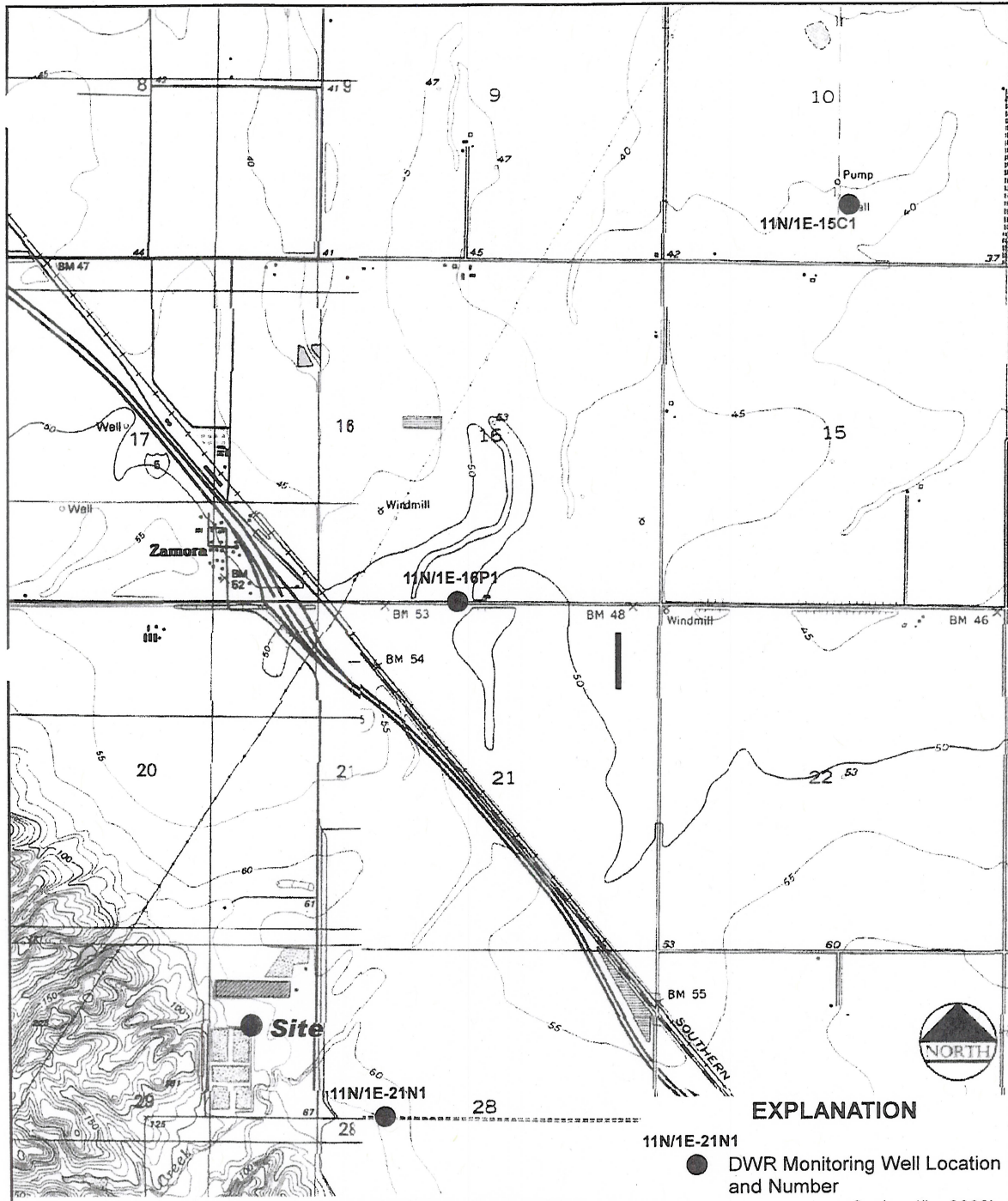
The results of any monitoring done more frequently than required at the locations specified in the MRP shall also be reported to the Central Valley Water Board.

The Discharger shall implement the above monitoring program on the effective date of this Order.

Ordered by: _____
PAMELA C. CREEDON, Executive Officer

Date

WLB



Reference: Maptech Topoquad, Zamora And El Dorado Bend, California Quadrangles

Scale: 1" = 2000'

RGH
CONSULTANTS

Job No: 2942.01.05.1

Date: Nov 2012

SITE LOCATION MAP AND DWR MONITORING WELLS

Northern Compost Recycling Facility
11220 County Road 94
Zamora, California

PLATE

1

Drawing Reference:
ROWD, Appendix C
Site Location Map, Plate 1
RGH Consultants

SITE LOCATION MAP
NORTHERN RECYCLING, LLC
NORTHERN RECYCLING COMPOST - ZAMORA
YOLO COUNTY



INFORMATION SHEET

ORDER NO. R5-2013-XXXX
NORTHERN RECYCLING, LLC
NORTHERN RECYCLING COMPOST - ZAMORA
YOLO COUNTY

Northern Recycling, LLC (hereafter, "Discharger") owns and operates the Northern Recycling Compost - Zamora facility (hereafter, "facility"), a composting facility in Yolo County as shown in Attachment A. The facility began operating in 2001 under a general conditional waiver of waste discharge requirements for green waste composting (Order No. 96-031). The facility was owned and operated by Grover Landscape Services from 2001 until 2008. The facility property was formerly a livestock feedlot until 1998 and contains five ponds that were formerly used for manure storage.

The Discharger submitted a 10 January 2013 Report of Waste Discharge (ROWD) to obtain individual waste discharge requirements (WDRs) in order to expand the area of the facility and to accept additional feedstocks (primarily food waste). The Discharger proposes to expand the area of the facility from 56 acres to 74 acres and to increase tonnages and volumes to 700 tons per day and 190,000 cubic yards onsite. The additional 18 acres will be used for finished compost storage and new runoff retention ponds. The Discharger proposes to compost up to 10 percent food waste mixed with green waste as co-collected organic materials from residential and commercial sources using various windrow composting methods on compacted soil pads with hydraulic conductivity of 1×10^{-6} centimeters per second (cm/s) or less. The Discharger also proposes to compost up to 40 percent food waste mixed with green waste using various covered aerated static pile (ASP) methods on a concrete pad with leachate drainage/aeration bunkers. The Discharger will construct a composite-lined leachate pond for the ASP leachate drainage, two composite-lined runoff retention ponds for leachate and contact water drainage from the pad areas, and two composite-lined overflow ponds for additional storage capacity when needed. The overflow ponds will be constructed in the area of two of the former manure storage ponds. The facility will also include a biomass energy plant that burns wood waste and overs for conversion into electricity. The proposed site plan is shown in Attachment B.

Surface water drainage from the composting areas will drain to composite-lined ponds. As proposed in the ROWD, this Order requires the ponds to be designed to capture leachate and runoff from the composting areas from at least average annual rainfall plus a 100-year, 24-hour storm event, and maintain two feet of freeboard in the ponds. Storm water in the surrounding areas flows to the Colusa Basin Drain.

WLB